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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/748,600	<b>Applicant(s)</b> KNOBL, KARL-HEINZ	
	<b>Examiner</b> Dominic D. Saltarelli	<b>Art Unit</b> 2623	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12, 15, 20-32, 35-43 and 45-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 15, 20-32, 35-43 and 45-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Response to Arguments

1. Applicant's arguments with respect to claims 1 and 27 regarding the use of an optical ring network have been considered but are moot in view of the new grounds of rejection.
2. Applicant's arguments filed May 10, 2007 regarding the applicability of the Wakai reference regarding claims 1 and 27 have been fully considered but they are not persuasive.

Applicant argues that Wakai does not disclose "providing information about available audio/video presentations independent of the appliances", citing that Wakai (nor any one reference, for that matter) does not disclose a control unit storing classified information transmitted from dissimilar elements (applicant's remarks, pages 13-14).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, the sources of content are dissimilar as established by the primary reference, Tanihira, who teaches an array of different appliances accessible for content reproduction through the network by a user, and the reporting of information that is classified into classes and subclasses to a control unit is taught by Klosterman. Wakai is further provided to demonstrate it

is known in passenger entertainment systems to present a user interface which provides a comprehensive list of content available to users. There is simply no mention of a source of any of the content listed in the interface, only a basic description of the content itself, and this is what makes the interface "device independent" because the user is provided with no indications regarding the source of the content, only with descriptions of the content itself. Therefore, when the teachings of Wakai are integrated into the combination of Tanihira and Klosterman, the user is presented with information about available presentations classified into class and subclass (Klosterman) originating from dissimilar elements (Tanihira), said information providing no indication of the source of the content (Wakai).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 4, 6, 11, 12, 15, 20, 27, 29, 31, 32, 34, 36, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanihira et al. (5,574,514, of record) [Tanihira] in view of Klosterman (5,923,362, of record), Wakai et al. (5,973,722, of record) [Wakai], and Stiegler et al. (5,936,969) [Stiegler].

Regarding claims 1 and 47, Tanihira discloses an audio/video system in a motor vehicle (fig. 2), comprising:

a network (fig. 2, col. 5, lines 36-53) in a motor vehicle (col. 2 line 66 – col. 3 line 6) having a data network (bus 71 and fibers 77), a control bus (bus 71), and a plurality of nodes (connectors 72);

A plurality of audio/video appliances (fig. 2, appliances 31, 32, 33, 34, 35, 36 and 41, col. 4 line 61 – col. 5 line 25) each having available audio/video presentations, said audio/video appliances respectively operatively connected to said plural nodes (as seen in fig. 2) for transmitting information to said network (col. 5, lines 54-64), said audio/video appliances including at least two dissimilar appliances, including a cassette player, a CD player, and a digital audio tape player (fig. 2, appliances 32, 33, and 34);

Audio/video output units (fig. 2, monitor 63 and speakers, shown at the outputs of amplifiers 61 and 62) for outputting audio/video signals (col. 5 line 65 – col. 6 line 24);

A control unit (fig. 2, system control unit [SCU] 21) having a control program (fig. 5, running on controller 21a, col. 7, lines 20-24);

An operating unit (fig. 2, commander 11) connected to said control unit (through bus 71 shown in fig. 2); and

A visual output unit (fig. 6, display unit 11d).

Tanihira fails to disclose the network is an optical ring network, appliances respectively transmit information about the available audio/visual presentations,

the control unit has a memory which stores the information about the available audio/visual presentations and can classify the information into a type class having subclasses for different subject matters, and the visual output unit is operatively arranged for displaying the information about the available audio/video presentations based on the class and subclass of the information independently of the appliances, thereby creating an appliance independent user interface allowing user selection of one of the audio/video presentations based on the class and subclass.

In an analogous art, Klosterman teaches a program guide system wherein guide information is received from several sources, each of the sources respectively transmitting information about available audio/visual presentations (col. 2, line 63 – col. 3 line 10), said system includes a control unit (coordinator 20 in figs. 1A and 1B) with a memory which stores information about the available presentations and can classify in the information into a type class having subclasses for different subject matters (col. 5 line 64 – col. 6 line 3, wherein the classes include the information which allows particular guides to be created, such as theme guides, col. 6, lines 18-36), providing the benefit of a sorted and organized list of available audio/visual presentations to a user (col. 3, lines 9-10).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Tanihira to include receiving information about the available audio/visual presentations at the control unit which classifies

the information into a type class having subclasses for different subject matters, wherein the information is provided by the source of the audio/visual presentations, a memory in the control unit for storing said information, and the visual display unit is operatively arranged for displaying the information about the available audio/video presentations based on the class and subclass information, allowing user selection of one of the audio/video presentations based on the class and the subclass, as taught by Klosterman. The reason for doing so is to present a sorted and organized list of available audio/visual presentations to a user, simplifying the selection process.

Tanihira and Klosterman fail to disclose the network is an optical ring network and the user interface provided is appliance independent, providing information about available audio/video presentations independently of the appliances.

In an analogous art, Wakai teaches accessing audio/visual presentations from audio/visual sources from a control unit by a passenger (col. 19, lines 24-30 and col. 20, lines 30-44), wherein the presentations are presented to the passenger independently of the sources (media controller 104 maintains a master list of all available material, col. 19, lines 33-36, and passengers access the content of this list using on-screen menus, col. 20, lines 38-44, because the content data being accessed is actually stored across several servers, col. 19, lines 37-42), simplifying the selection of content by passengers by using a dynamic master list of all available content (the list of media controller 104).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Tanihira and Klosterman to include displaying the information about the available audio/video presentations independently of the sources of said presentations, as taught by Wakai, for the benefit of simplifying the selection of audio/visual presentations by presenting what is available, alleviating the complication of listing what all is available per appliance.

Tanihira, Klosterman, and Wakai fail to disclose the network is an optical ring network.

In an analogous art, Stiegler teaches using optical ring networks to transmit data in a motor vehicle, which is advantageous for low latency and light weight (fig. 1, col. 4, lines 3-19).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Tanihira, Klosterman, and Wakai to include an optical ring network, as taught by Stiegler, for the benefit of low latency and use of light weight materials.

Regarding claims 27 and 48, Tanihira discloses a method for operating a motor vehicle (col. 2 line 66 – col. 3 line 6) multimedia system (fig. 2) having a plurality of audio/video appliances including at least two dissimilar appliances, which include a cassette player, CD player, and digital audio tape player (fig. 2,



appliances 31, 32, 33, 34, 35, 36 and 41, col. 4 line 61 – col. 5 line 25), including the steps of:

Controlling the connections using a control unit (fig. 2, system control unit [SCU] 21, col. 7, lines 5-24)

Connecting the audio/video appliances and the control unit using a local network (fig. 2, col. 5, lines 36-53);

Connecting, by the control unit, audio/visual appliances to an output unit (connections are made via system control unit [SCU] 21 from the appliances to an output unit such as monitor 63, shown in fig. 2, col. 7, lines 20-24);

Selecting, using an operating unit (commander 11) connected the control unit (21), one the of available audio/video presentations (col. 6, lines 25-55); and

Playing back selected audio/video presentations via the output unit (col. 6, lines 13-17).

Tanihira fails to disclose the local network is an optical ring network and the appliances and control unit are connected to the optical ring network by a plurality of nodes on the optical ring network, transmitting information about available audio/video presentations from the audio/video appliances to the control unit, processing, at the control unit, the information about the available audio/video presentations into classes independently of the appliances, the classes including a station class having subclasses for different categories of broadcast stations, a type class having subclasses for different subject matters, and a title class having subclasses for generic titles of data mediums of each

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audio/visual presentation; outputting the information about the available audio/video presentations which has been processed into classes independently of the appliances onto a visual output unit; and selecting by the control unit an audio/visual appliance which is suitable for playing back a selected audio/video presentation.

In an analogous art, Klosterman teaches a program guide system wherein guide information is received from several sources, each of the sources respectively transmitting information about available audio/visual presentations (col. 2, line 63 – col. 3 line 10), said system includes a control unit (coordinator 20 in figs. 1A and 1B) with a memory which stores information about the available presentations and can classify in the information into classes, the classes including a station class having subclasses for different categories of broadcast stations, a type class having subclasses for different subject matters, and a title class having subclasses for generic titles of data mediums of each audio/visual presentation (col. 5 line 64 – col. 6 line 3, wherein the classes include the information which allows particular guides to be created, such as a channel guide listing categories of broadcast stations, col. 6, lines 37-59, theme guides, col. 6, lines 18-36, all guides include title information, see fig. 2, so a title class for identifying the generic titles [each individual title being a subclass] is also included), providing the benefit of a sorted and organized list of available audio/visual presentations to a user (col. 3, lines 9-10).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Tanihira to include receiving information, including classification information, about the available audio/visual presentations at the control unit, wherein the information is provided by the source of the audio/visual presentations, processing the information about the available audio/video presentations into classes, the classes including a station class having subclasses for different categories of broadcast stations, a type class having subclasses for different subject matters, and a title class having subclasses for generic titles of data mediums of each audio/visual presentation, and outputting the information to a visual display unit, as taught by Klosterman. The reason for doing so is to present a sorted and organized list of available audio/visual presentations to a user, simplifying the selection process.

Tanihira and Klosterman fail to disclose the local network is an optical ring network and the appliances and control unit are connected to the optical ring network by a plurality of nodes on the optical ring network and classifying audio/video presentations independently of the appliances and selecting, by the control unit, an audio/video appliance which is suitable for playing back the selected audio/video presentation.

In an analogous art, Wakai teaches accessing audio/visual presentations from audio/visual sources from a control unit by a passenger (col. 19, lines 24-30 and col. 20, lines 30-44), wherein the presentations are presented to the passenger independently of the sources (media controller 104 maintains a

master list of all available material, col. 19, lines 33-36, and passengers access the content of this list using on-screen menus, col. 20, lines 38-44, because the content data being accessed is actually stored across several servers, col. 19, lines 37-42, thus the correct server is accessed automatically), simplifying the selection of content by passengers by using a dynamic master list of all available content (the list of media controller 104)..

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Tanihira and Klosterman to include displaying the information about the available audio/video presentations independently of the sources of said presentations and subsequently selecting an appliance which is suitable for playing back a selected presentation, as taught by Wakai, for the benefit of simplifying the selection of audio/visual presentations by presenting what all is available in a straightforward manner.

Tanihira, Klosterman, and Wakai fail to disclose the local network is an optical ring network and the appliances and control unit are connected to the optical ring network by a plurality of nodes on the optical ring network.

In an analogous art, Stiegler teaches using optical ring networks which connects devices via nodes on the optical ring network to transmit data in a motor vehicle, which is advantageous for low latency and light weight (figs. 1-2, col. 4 line 45 – col. 5 line 12 and col. 4, lines 3-19).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Tanihira, Klosterman, and Wakai to include

an optical ring network wherein the appliances and control unit are connected to the optical ring network by a plurality of nodes on the optical ring network, as taught by Stiegler, for the benefit of low latency and use of light weight materials.

Regarding claims 3 and 29, Tanihira further discloses said operating unit comprises means for selecting (fig. 6, key input unit 11c) a selected one of the available audio/video presentations (col. 7, lines 30-32) independently of the appliances (as taught by Wakai) and means for automatically retrieving the selected one of the available audio/video presentations using said control unit (fig. 5, control means being run on microprocessor 21a, col. 7, lines 5-19) such that all of said A/V appliances are operable using said operating unit (there is no teaching of restricting usage to certain controllers, thus all of the controllers have access to all of the appliances).

Regarding claim 4, Wakai additionally teaches a plurality of audio/video output units for outputting audio/video signals (seat peripherals which deliver audio/video content to passengers, col. 7, lines 47-62), enabling different audio/video presentations to be delivered to multiple passengers simultaneously (col. 8 line 54 – col. 9 line 21).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system of Tanihira, Klosterman, Wakai, and Stiegler to include a plurality of audio/video output units, as taught by Wakai, for the benefit of

delivering different audio/video presentations to multiple passengers concurrently.

Regarding claim 6, Tanihira further discloses a plurality of operating units (commanders 11 and 12 in fig. 2) connected to said control unit (SCU 21).

Regarding claims 11 and 32, Tanihira further discloses said control unit comprises means for reducing, then restoring, volume when the selected one of the available audio/video presentations is changed (col. 10 line 55 – col. 11 line 22).

Regarding claim 12, Tanihira, Klosterman, Wakai, and Stiegler disclose the system of claim 1, and Tanihira further discloses said operating unit comprises a start playback function (play key) and a change volume function (volume up/down key) (col. 7, lines 46-58), but Tanihira, Klosterman, Wakai, and Stiegler fail to disclose a stop playback function.

Stop playback functions are notoriously well known in the art, such as pause keys which temporarily suspend the playback of recorded material, stop keys which halt the playback of recorded material, and power keys that power down a system, thus stopping the playback any active presentation, enabling a user to stop playback of a presentation whenever desired.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system of Tanihira, Klosterman, Wakai, and Stiegler to include a stop playback function, for the benefit of enabling a user to stop playback of an audio/video presentation whenever desired.

Regarding claim 15, Tanihira further discloses one of said plural audio/video appliances is operatively arranged for reading map data for a navigation system (col. 9 line 64 – col. 10 line 17).

Regarding claim 20, Tanihira further discloses available presentations include information which is not continuously available, as the information from the AM/FM tuner 36 and the TV tuner 41 in fig. 2 are only available at the times the information is being broadcast, and thus a class which accesses these sources is a class for information which is not continuously available.

Regarding claim 31, Tanihira further discloses means for connecting an audio/video appliance to an audio/video output unit (software running on controller 21a in fig. 5, col. 7, lines 5-24), wherein when two devices provide the same information (same audio/video presentations, such as audio sources that provide the same information but one is superior to the other, col. 5, lines 4-9), the device with the highest priority provides the information to the output unit (only the highest priority devices 'survive' request conflicts, col. 12, lines 25-27).

Regarding claim 34, Tanihira, Klosterman, Wakai, and Stiegler disclose the method of claim 27, wherein Tanihira further discloses available presentations comprise radio stations (from AM/FM tuner 36 in fig. 2) and TV stations (from TV tuner 41 in fig. 2) and information which is not continuously available, as the information from the AM/FM tuner 36 and the TV tuner 41 in fig. 2 are only available at the times the information is being broadcast, thus the classifications include classifications for radio (music titles) and TV stations, classifications for the type and audio and video presentations available (Klosterman's theme guides require classification by type, col. 6, lines 18-36) and classifications for information which is not continuously available (scheduled broadcast material).

Regarding claim 36, Tanihira, Klosterman, Wakai, and Stiegler disclose the method of claim 27, wherein the number of classes is exapandable (Klosterman teaches the structured framework by which data regarding available presentations is stored is generated dynamically by the coordinator, col. 5 line 64 – col. 6 line 3).

5. Claims 2 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanihira, Klosterman, Wakai, and Stiegler as applied to claims 1 and 27 above, and further in view of Rowe et al. (5,623,613) [Rowe].



Regarding claims 2 and 28, Tanihira, Klosterman, Wakai, and Stiegler disclose the system and method of claims 1 and 27, but fail to disclose said audio/visual output unit displays the class, the subclasses for a selected class, and names for ones of said audio/video presentations in a selected class and subclass.

In an analogous art, Rowe teaches a program guide that displays the class, the subclasses for a selected class, and names for ones of said audio/video presentations in a selected class and subclass (figs. 2-8), for the benefit of assisting a user in easily finding desired audio/visual presentation (col. 2, lines 34-50 and col. 5, lines 10-23).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system and method disclosed by Tanihira, Klosterman, Wakai, and Stiegler to include in each class, subclasses, which upon selection of a subclass would display to the user on the audio/visual display unit the names for the presentations within said selected class and subclass, as taught by Rowe, for the benefit of more easily locating and selecting desired presentations.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanihira, Klosterman, Wakai, and Stiegler as applied to claim 4 above, and further in view of Katayama et al. (6,141,036, of record) [Katayama].

Regarding claim 5, Tanihira, Klosterman, Wakai, and Stiegler disclose the system of claim 4, but fail to disclose said operating unit comprises means for selecting one of said plural audio/visual output units.

In an analogous art, Katayama teaches enabling a user to select a desired output device for playback of output from an image reproducing means through selection from a displayed menu (col. 8 line 64 – col. 9 line 7), granting a user control over where content is displayed.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Tanihira, Klosterman, Wakai, and Stiegler to include means for selecting an output unit, as taught by Katayama, for the benefit of enabling a user to display a requested audio/visual presentation at whichever output unit the user desires.

7. Claims 7, 8, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanihira, Klosterman, Wakai, and Stiegler as applied to claims 6 and 27 above, and further in view of Ishiguro et al. (4,751,581, of record) [Ishiguro].

Regarding claim 7, Tanihira, Klosterman, Wakai, and Stiegler disclose the system of claim 6, but fail to disclose each of said plural operating units is assigned a priority.

In an analogous art, Ishiguro teaches controlling an output unit (a television) with several operating units (remote control and a manual input device, col. 5, lines 30-38), wherein the operating units are assigned priority (col.

5, lines 38-45), providing conflict resolution if control signals are received concurrently by providing means to select only one (col. 5, lines 52-68).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Tanihira, Klosterman, Wakai, and Stiegler to include assigning priority to the operating units, as taught by Ishiguro, for the benefit of providing a means of conflict resolution when receiving commands from the plurality of operating units.

Regarding claim 8, Ishiguro further teaches a selection made using an operating unit with a high priority is prevented from being modified by another operating unit have a lower priority (upon receiving conflicting selections, the selection made by the lower priority device is discarded, col. 5, lines 52-68).

Regarding claim 30, Tanihira, Klosterman, Wakai, and Stiegler disclose the method of claim 27, but fail to disclose each of said plural operating units is assigned a priority and a selection made using a first operating unit with a first priority is only modified is done using an operation unit with higher priority.

In an analogous art, Ishiguro teaches controlling an output unit (a television) with several operating units (remote control and a manual input device, col. 5, lines 30-38), wherein the operating units are assigned priority (col. 5, lines 38-45), wherein a selection made using an operating unit with a high priority is prevented from being modified by another operating unit have a lower

priority (upon receiving conflicting selections, the selection made by the lower priority device is discarded, col. 5, lines 52-68), providing conflict resolution if control signals are received concurrently by providing means to select only one (col. 5, lines 52-68).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Tanihira, Klosterman, Wakai, and Stiegler to include assigning priority to the operating units and a selection made using a first operating unit with a first priority is only modified is done using an operation unit with higher priority, as taught by Ishiguro, for the benefit of providing a means of conflict resolution when receiving commands from the plurality of operating units

8. Claims 9, 10, 24, 25, and 38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanihira, Klosterman, Wakai, and Stiegler as applied to claims 3 and 27 above, and further in view of Edson (6,526,581, of record).

Regarding claim 9, Tanihira, Klosterman, Wakai, and Stiegler disclose the system of claim 3, and further disclose the audio/visual appliances have priority (Tanihira, col. 5, lines 30-35), but fail to disclose said control unit is operatively arranged for assigning a priority to each of said plural audio/video appliances.

In an analogous art, Edson discloses a gateway device which assigns priorities to different services (col. 9, lines 25-33), allowing the device which connects services to output devices to enable services which are more

immediate, urgent, needed, or necessary to take precedence over services which are less so in a flexible manner.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Tanihira, Klosterman, Wakai, and Stiegler to operatively arrange the control unit to assign priority, as taught by Edson, for the benefit of enabling the control unit which connects services to output devices to enable services which are more immediate, urgent, needed, or necessary to take precedence over services which are less so in a flexible manner.

Regarding claim 10, Tanihira further discloses means for connecting an audio/video appliance to an audio/video output unit (software running on controller 21a in fig. 5, col. 7, lines 5-24), wherein when two devices provide the same information (same audio/video presentations, such as audio sources that provide the same information but one is superior to the other, col. 5, lines 4-9), the device with the highest priority provides the information to the output unit (only the highest priority devices 'survive' request conflicts, col. 12, lines 25-27).

Regarding claims 24, 25, and 38-42, Tanihira, Klosterman, Wakai, and Stiegler disclose the system and method of claims 1 and 27, wherein the presence of a first service module for selecting a suitable audio/video appliance for playing back the selected audio/video presentation is an inherent feature of the disclosed combination, because Wakai teaches selection of presentations is

performed independently of the source of the presentation (as described regarding claims 1 and 27), thus requiring the presence of a software module running on the controller (Tanihira, controller 21a in fig. 5) or equivalent device to identify the suitable appliance for playing back the selected presentation by whatever means necessary. Tanihira, Klosterman and Wakai fail to disclose said control program comprises a plurality of service modules which comprise a second service module for selecting and managing said output unit; a third service module for connecting the network's node addresses stipulated by the selection of the first and second service modules; and a fourth service module which requests the function of the first second, and third service modules.

In an analogous art, Edson teaches a control unit (fig. 1, gateway 13) which interconnects a plurality of devices in a network (col. 7, lines 36-43) and includes a service module for selecting and managing output units (output units are any device which displays information whose source is another device on the network, such as described in col. 11, lines 30-40 where a PC displays web pages from a data device within the network, and the service module is the means by which said output unit is identified and managed, the application program interface, or API, col. 8, lines 3-11), a service module for connecting node addresses (router 103, col. 10, lines 55-65), and a service module for calling and coordinating all other resident service modules (the operating system, col. 11 lines 3-19). Implementation of such service modules is utilizing an open

API type interface, which facilitates the addition of new types of devices for communication via the network (col. 12, lines 50-56).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system and method and Tanihira, Klosterman, Wakai, and Stiegler to include a second service module for selecting and managing said output unit; a third service module for connecting the network's node addresses stipulated by the selection of the first and second service modules; and a fourth service module which requests the function of the first second, and third service modules, as taught by Edson, for the benefit of implementing an open API type interface which facilitates the addition of new types of devices for communication via the network, increasing the flexibility of the network.

9. Claims 21 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanihira, Klosterman, Wakai, and Stiegler as applied to claims 1 and 27 above, and further in view of Looney et al. (6,232,539, of record) [Looney].

Regarding claims 21 and 35, Tanihira, Klosterman, Wakai, and Stiegler disclose the system of claims 1 and 27, but fail to disclose a single audio/visual presentation is assigned to a plurality of applicable classes and subclasses.

In an analogous art, Looney teaches classifying content into categories (seen in fig. 13, such as classical, jazz, and folk), and also classifying into more general types as well (seen in fig. 13, such as dance, SP dance, and energy), and music titles include classification information which places the titles into more

than one such class (titles include information which places them according to category, style, dance type, speed, and energy, col. 11, lines 10-16), enabling users to more effectively find desired titles when selecting by category by removing strict limitations imposed by exclusive categories on the location of titles, as one title could be found in multiple categories if it meets the criteria for each (col. 10 line 63 – col. 11 line 16).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Tanihira, Klosterman, Wakai, and Stiegler to include assigning an audio/video presentation to a plurality of applicable classes and subclasses, as taught by Looney, for the benefit of enabling users to more effectively find desired audio/visual presentations categorically.

10. Claims 22, 23, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanihira, Klosterman, Wakai, and Stiegler as applied to claims 1 and 27 above, and further in view of Beckert et al. (WO 99/35009, of record) [Beckert].

Regarding claim 22, Tanihira, Klosterman, Wakai, and Stiegler disclose the system of claim 1, but fail to disclose the optical ring network comprises an open system.

In an analogous art, Beckert teaches utilizing an open system for a local area network (page 6, lines 13-17), enabling the interoperation of various applications and hardware devices by the network which can all come from



various independent vendors and subsequently installed at any time (page 6, lines 13-23).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Tanihira, Klosterman, Wakai, and Stiegler implement the optical ring network as an open system, as taught by Beckert, for the benefit of maximizing the flexibility and upgradeability of the system through the interoperation of different devices from different vendors, said devices thus enabled to be replaced, added, or upgraded at any time.

Regarding claims 23 and 37, Tanihira, Klosterman, Wakai, and Stiegler disclose the system of claims 1 and 27, but fail to disclose said control unit comprises virtual interfaces for each of said audio/visual appliances.

In an analogous art, Beckert teaches using an application program interface (API) for supporting a plurality of different sources in an entertainment system, wherein the use of an API establishes virtual interfaces that enable communications between requesting applications and source devices (page 22, lines 9-15). Using an API frees an application from having to know the hardware and implementation details of the information sources (page 22, lines 9-12), increasing the flexibility of the system by allowing for the connection of diverse source devices.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system and method disclosed by Tanihira, Klosterman, Wakai,

and Stiegler to include virtual interfaces for each of the audio/video appliances in the control unit, as taught by Beckert, for the benefit of increasing the flexibility of the system by allowing for the connection of diverse audio/visual appliances.

11. Claims 26 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanihira, Klosterman, Wakai, and Stiegler as applied to claims 1 and 27 above, and further in view of Becker (6,157,725, of record).

Regarding claims 26 and 43, Tanihira, Klosterman, Wakai, and Stiegler disclose the system of claims 1 and 27, but fail to disclose said control program comprises a registration module for registering newly connected audio/video appliances.

In an analogous art, Becker teaches a registration module (running in control unit 2 in fig. 1) which tracks and records the removal, replacement, and addition of audio/visual units to and from the network (col. 9, lines 43-48), keeping the known system configuration current.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system and method disclosed by Tanihira, Klosterman, Wakai, and Stiegler to include a registration module, as taught by Becker, for the benefit of maintaining a current knowledge base of system configuration.

12. Claims 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanihira, Klosterman, Wakai, and Stiegler as applied to claims 1 and 27 above, and further in view of Yee et al. (5,210,611, of record) [Yee].

Regarding claims 45 and 46, Tanihira, Klosterman, Wakai, and Stiegler disclose the system of claims 1 and 27, but fail to disclose a report class.

In an analogous art, Yee teaches categorizing content according to classes, said classes including sports and news classes, allowing users to quickly find report type content (news and sporting event reports) should they be interested in such (col. 6 line 54 – col. 7 line 19).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Tanihira, Klosterman, Wakai, and Stiegler, to include a report class, as taught by Yee, for the benefit of allowing users to locate report type content, such as news and sports programs.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D. Saltarelli whose telephone number is (571) 272-7302. The examiner can normally be reached on Monday - Friday 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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DS

  
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